

### **Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-39 (previously canceled)

40. (previously presented) A method of detecting 1) one or more antibodies selected from the group consisting of Human Immunodeficiency Virus-1 (HIV-1) antibody and Human Immunodeficiency Virus-2 (HIV-2) antibody, and 2) one or more antigens selected from the group consisting of HIV-1 antigen and HIV-2 antigen, in a test sample suspected of containing said one or more of said antibodies and one or more of said antigens, comprising the steps of:

a) contacting said test sample with at least one HIV-1 antigen which binds to HIV-1 antibody for a time and under conditions sufficient for the formation of HIV-1 antigen/HIV-1 antibody complexes, said HIV-1 antigen being a p24 core antigen;

b) detecting said HIV-1 antigen/HIV-1 antibody complexes, presence of said complexes indicating presence of HIV-1 antibody in said test sample;

c) contacting said test sample with at least one HIV-2 antigen which binds to HIV-2 antibody for a time and under conditions sufficient for the formation of HIV-2 antigen/HIV-2 antibody complexes, said HIV-2 antigen being a p26 core antigen;

d) detecting said HIV-2 antigen/HIV-2 antibody complexes, presence of said complexes indicating presence of HIV-2 antibody in said test sample;

e) contacting said test sample with at least one monoclonal antibody selected from the group consisting of 120A-270 produced by the cell line having A.T.C.C. Deposit No. PTA-3890, 115B-151 produced by the cell line having A.T.C.C. Deposit No. PTA-2809, 117-289 produced by the cell line having A.T.C.C. Deposit No. PTA-2806, 103-350 produced by the cell line having A.T.C.C. Deposit No. PTA-2808, 115B-303 produced by the cell line having A.T.C.C. Deposit No. PTA-2810 and 108-394 produced by the cell line having A.T.C.C. Deposit No. PTA-2807 which binds to a shared epitope of Human Immunodeficiency Virus-1 protein p24 and Human Immunodeficiency Virus-2 protein p26 for a time and under conditions sufficient for the formation of

antibody/antigen complexes; and

f) detecting said complexes, presence of said complexes indicating presence of at least one antigen selected from the group consisting of HIV-1 antigen and HIV-2 antigen, in said test sample.

41. (previously presented) A method of detecting 1) one or more antibodies selected from the group consisting of HIV-1 antibody and HIV-2 antibody, and 2) one or more antigens selected from the group consisting of HIV-1 antigen and HIV-2 antigen, in a test sample suspected of containing said one or more of said antibodies and one or more of said antigens, comprising the steps of:

a) contacting said test sample with at least one HIV-1 antigen which binds to HIV-1 antibody for a time and under conditions sufficient for the formation of HIV-1 antigen/HIV-1 antibody complexes, said HIV-1 antigen being a p24 core antigen;

b) adding a conjugate to the resulting HIV-1 antigen/HIV-1 antibody complexes for a time and under conditions sufficient to allow said conjugate to bind to the bound antibody, wherein said conjugate comprises an antigen attached to a signal generating compound capable of generating a detectable signal;

c) detecting HIV-1 antibody which may be present in said test sample by detecting a signal generated by said signal generating compound, presence of said signal indicating presence of HIV-1 antibody in said test sample;

d) contacting said test sample with at least one HIV-2 antigen which binds to HIV-2 antibody for a time and under conditions sufficient for the formation of HIV-2 antigen/HIV-2 antibody complexes, said HIV-2 antigen being a p26 core antigen;

e) adding a conjugate to the resulting HIV-2 antigen/HIV-2 antibody complexes for a time and under conditions sufficient to allow said conjugate to bind to the bound antibody, wherein said conjugate comprises an antigen attached to a signal generating compound capable of generating a detectable signal;

f) detecting HIV-2 antibody which may be present in said test sample by detecting a signal generated by said signal-generating compound, presence of said signal indicating presence of HIV-2 antibody in said test sample;

g) contacting said test sample with at least one monoclonal antibody selected from the group consisting of 120A-270 produced by the cell line having A.T.C.C.

Deposit No. PTA-3890, 115B-151 produced by the cell line having A.T.C.C. Deposit No. PTA-2809, 117-289 produced by the cell line having A.T.C.C. Deposit No. PTA-2806, 103-350 produced by the cell line having A.T.C.C. Deposit No. PTA-2808, 115B-303 produced by the cell line having A.T.C.C. Deposit No. PTA-2810 and 108-394 produced by the cell line having A.T.C.C. Deposit No. PTA-2807 which binds to a shared epitope of Human Immunodeficiency Virus-1 protein 24 and Human Immunodeficiency Virus-2 protein p26 for a time and under conditions sufficient for the formation of antibody/antigen complexes;

h) adding a conjugate to the resulting antibody/antigen complexes for a time and under conditions sufficient to allow said conjugate to bind to the bound antigen, wherein said conjugate comprises an antibody attached to a signal generating compound capable of generating a detectable signal; and

i) detecting presence of antigen which may be present in said test sample by detecting a signal generated by said signal generating compound, presence of said signal indicating presence of at least one antigen selected from the group consisting of HIV-1 antigen and HIV-2 antigen in said test sample.

42. (new) A method of detecting 1) one or more antibodies selected from the group consisting of HIV-1 antibody and HIV-2 antibody, and 2) one or more antigens selected from the group consisting of HIV-1 antigen and HIV-2 antigen, in a test sample suspected of containing said one or more of said antibodies and one or more of said antigens, comprising the steps of:

a) contacting said test sample with at least one HIV-1 p24 core antigen which binds to HIV-1 antibody for a time and under conditions sufficient for the formation of HIV-1 p24 core antigen/HIV-1 antibody complexes;

b) adding a conjugate to the resulting HIV-1 p24 core antigen/HIV-1 antibody complexes for a time and under conditions sufficient to allow said conjugate to bind to the bound HIV-1 antibody, wherein said conjugate comprises an antigen for for said HIV-1 antibody attached to a signal generating compound capable of generating a detectable signal;

c) detecting HIV-1 antibody which may be present in said test sample by

detecting a signal generated by said signal generating compound, presence of said signal indicating presence of HIV-1 antibody in said test sample;

d) contacting said test sample with at least one HIV-2 p26 core antigen which binds to HIV-2 antibody for a time and under conditions sufficient for the formation of HIV-2 p26 core antigen/HIV-2 antibody complexes;

e) adding a conjugate to the resulting HIV-2 p26 core antigen/HIV-2 antibody complexes for a time and under conditions sufficient to allow said conjugate to bind to the bound antibody, wherein said conjugate comprises an antigen for said HIV-2 antibody attached to a signal generating compound capable of generating a detectable signal;

f) detecting HIV-2 antibody which may be present in said test sample by detecting a signal generated by said signal-generating compound, presence of said signal indicating presence of HIV-2 antibody in said test sample;

g) contacting said test sample with at least one monoclonal antibody selected from the group consisting of 120A-270 produced by the cell line having A.T.C.C. Deposit No. PTA-3890, 115B-151 produced by the cell line having A.T.C.C. Deposit No. PTA-2809, 117-289 produced by the cell line having A.T.C.C. Deposit No. PTA-2806, 103-350 produced by the cell line having A.T.C.C. Deposit No. PTA-2808, 115B-303 produced by the cell line having A.T.C.C. Deposit No. PTA-2810 and 108-394 produced by the cell line having A.T.C.C. Deposit No. PTA-2807 which bind to one or more antigens selected from the group consisting of HIV-1 antigen and HIV-2 antigen for a time and under conditions sufficient for the formation of antibody/antigen complexes;

h) adding a conjugate to the resulting antibody/antigen complexes for a time and under conditions sufficient to allow said conjugate to bind to the bound one or more antigens selected from the group consisting of HIV-1 antigen and HIV-2 antigen, wherein said conjugate comprises an antibody attached to a signal generating compound capable of generating a detectable signal; and

i) detecting presence of said one or more antigens selected from the group consisting of HIV-1 antigen and HIV-2 antigen which may be present in said test sample by detecting a signal generated by said signal generating compound, presence of said signal indicating presence of at least one antigen selected from the group consisting of HIV-1 antigen and HIV-2 antigen in said test sample.